

Work Order ID 147969

Friday, June 17, 2016 8:00:17 AM

147969

Page 1

Item ID: D2572

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Saddle, Fwd, In

Start Date: 6/15/2016 Start Qty: 8.00

8

Cust Item ID:

Required Date: 6/27/2016 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: MLJ Date: JUN 20 2016 Tooling: _____ Date: _____Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2572	F

100

0.02

100

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.51

HAAS CNC vertical machine #1

Program Batch No. 147969Double check by: mmL

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets

2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets

3-Machine Step No 3 per Folio FA051 and insp

8 0 _____ **DAS** SL16-7-17
44
9-89 16-07-13

110

0.00

110

CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

0.21

Conventional Milling Machine

Machine keyway as per dwg D2571 & D2572

8 0 _____ **DAS** SL16-7-17
44
9-89 16-07-13

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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1 47969

Friday, June 17, 2016 8:00:17 AM

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

g

8

Customer:

Run Start *NR1*

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.01

Quality Control

DAS *sh*
44
9-89 16-07-13

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.03

Quality Control

Dr. 32 / DAS 45
9-89 9-89

16-01-19 2016-7-19

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.04

Hand Finishing

DAS
34

2016/07/19
BEB

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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Work Order ID 147969

Friday, June 17, 2016 8:00:17 AM

147969

Page 3

Item ID: D2572 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle, Fwd, In
 Start Date: 6/15/2016 Start Qty: 8.00 ***8*** Cust Item ID:
 Required Date: 6/27/2016 Req'd Qty: 8.00 ***8*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per Q81005 4.3-Alum <i>M 164798</i> Memo START TIME: <i>8:00</i> OVEN TEMPERATURE: <i>320</i> FINISH TIME: <i>8:50</i>	0.00 0.05				<i>8</i>	<i>0</i>	<i>16.07-2016</i>	<i>8.89</i>
160 *160* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.01				<i>(8)</i>			DAS 38 9-89 JUL 20 2016
170 *170* Packaging Packaging	Identify as per dwg & Stock Location: <i>SK97</i> Memo	0.00 0.01				<i>8</i>			DAS 9-89 JUL 21 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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OTHER : _____																																																																				

1 47969

Friday, June 17, 2016 8:00:17 AM

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Start Date: 6/15/2016 **Start Qty:** 8.00 ***g***

Required Date: 6/27/2016 **Req'd Qty:** 8.00 ***Q***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code
---------	--------	-----------

**Accept
Qty**

Reject
QtyReject
Number

**Insp.
Stamp**

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.13

Quality Control

DAS
21
9-89

JUL 21 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
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LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Picklist Print

Friday, June 17, 2016 8:00:17 AM

Page 1

Work Order ID: 147969

147969

Parent Item: D2572

D2572

Parent Item Name: Saddle, Fwd, In

Start Date: 6/15/2016

Required Date: 6/27/2016

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP: I02.10.02Re-format; Change to Dwg Rev. D & incorporated
D2572KJ

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-005		Manufactured	No			100	Each	0.0000	1	8			
D6101-005									**	DAS	44	116-07-12	
Saddle Billet										9-99			

147082 → 2
146278 → 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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								OTHER :																	

DART AEROSPACE LTD	Work Order: 147969
Description: Saddle, Fwd Inboard	Part Number: D2572
Inspection Dwg: D2572 Rev. F	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		.438	.438	.438	.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		.500	.500	.501	.500		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.375	.375	.375	.375		
I	0.490	0.510		.500	.500	.500	.501		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.568	.568	.569		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.130	.130	.130	.130		
Q	0.115	0.135		.127	.126	.124	.125		
R	0.240	0.260		.252	.251	.249	.250		
S	0.115	0.135		.125	.125	.126	.125		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		.240	.241	.240	.240		
W	0.115	0.135		.124	.125	.127	.127		
X	0.307	0.312		.310	.310	.310	.311		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.364	.364	.365	.362		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.625	.625	.623	.624		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.251	.251	.250	.250		
AE	1.375	1.395		1.385	1.385	1.385	1.385		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.250	.250	.250	.250		
AH	0.240	0.260		.249	.247	.250	.249		
AI	2.000	2.020		2.000	2.000	2.000	2.000		
AJ	0.023	0.043		.033	.033	.033	.033		

Accept/Reject ^{DAS}

^{DAS}

DAS
45

Measured by: 44	
Date: 10-07-13	16-7-16

Audited by: 32	
Date: 16-07-19	2016-7-19

Rev	Date	Change	Revised by	Approved
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	
F	13.03.07	Dwg Rev updated	KJ	

DART AEROSPACE LTD	Work Order: 147969
Description: Saddle, Fwd Inboard	Part Number: D2572
Inspection Dwg: D2572 Rev. F	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	15	16	17	18		
A	0.438	0.443		.438	.438	.438	.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
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I	0.490	0.510		.500	.500	.499	.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.568	.567	.568		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
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R	0.240	0.260		.250	.250	.250	.250		
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AJ	0.023	0.043		.033	.033	.033	.033		

Accept/Reject

DAS

45

Measured by: JL
Date: 16-7-16

Audited by: 32	9-89
Date: 16-07-19	2016-7-19

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